

**FIG. 1**

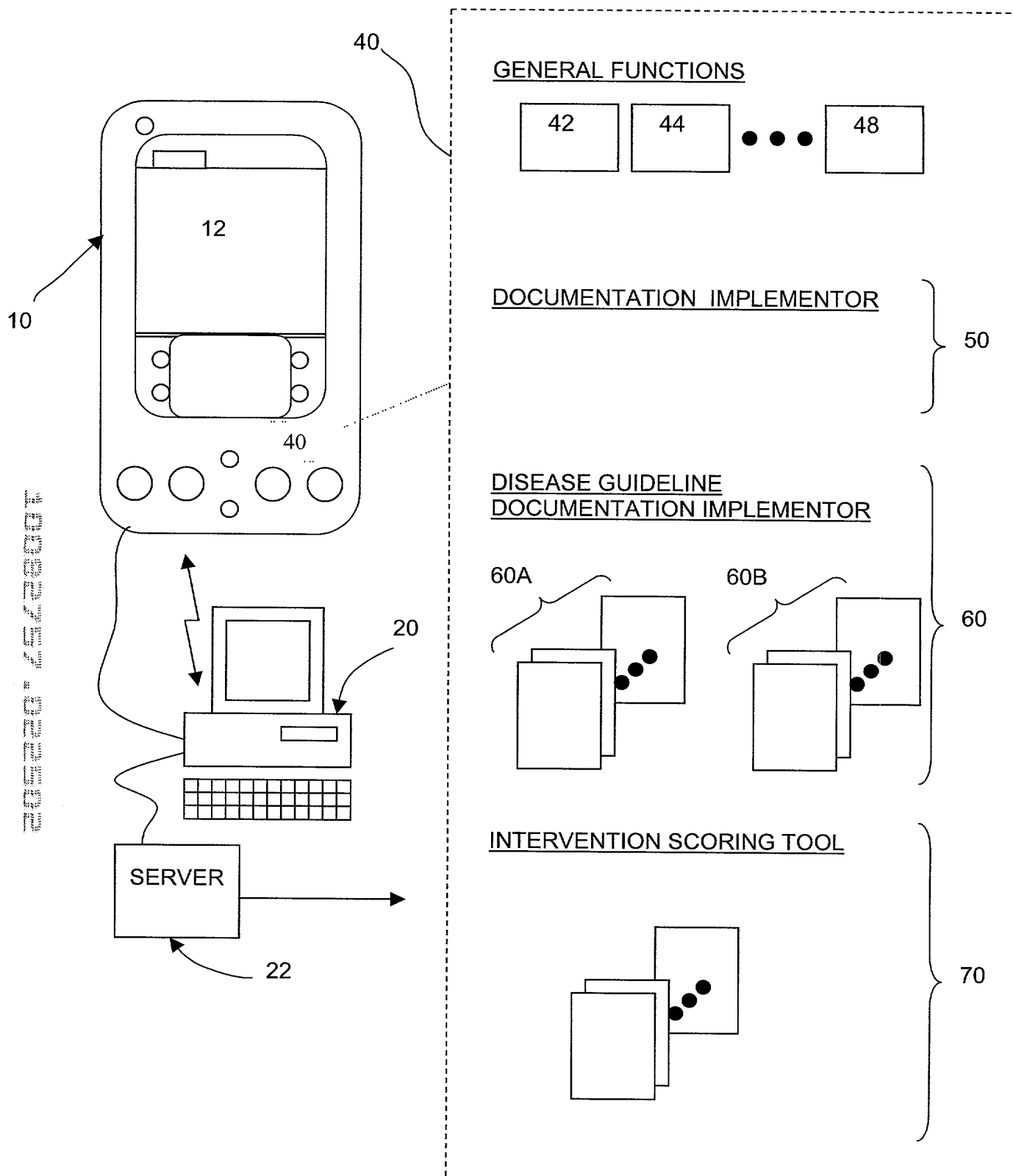


FIG. 2

FIG. 3.1

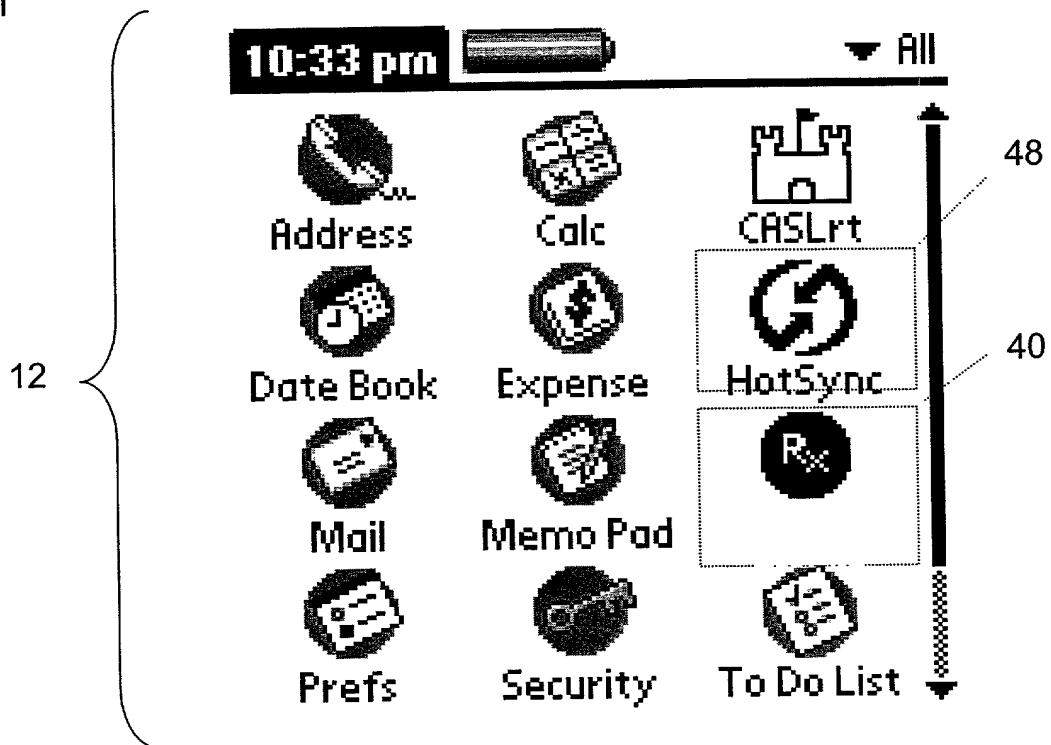


FIG. 3.2



**Pharmacy Intervention  
Documentation System**

**Copyright © 2002  
Integrated Software  
Systems, LLC**

Enter Intervention

102



FIG. 3.3

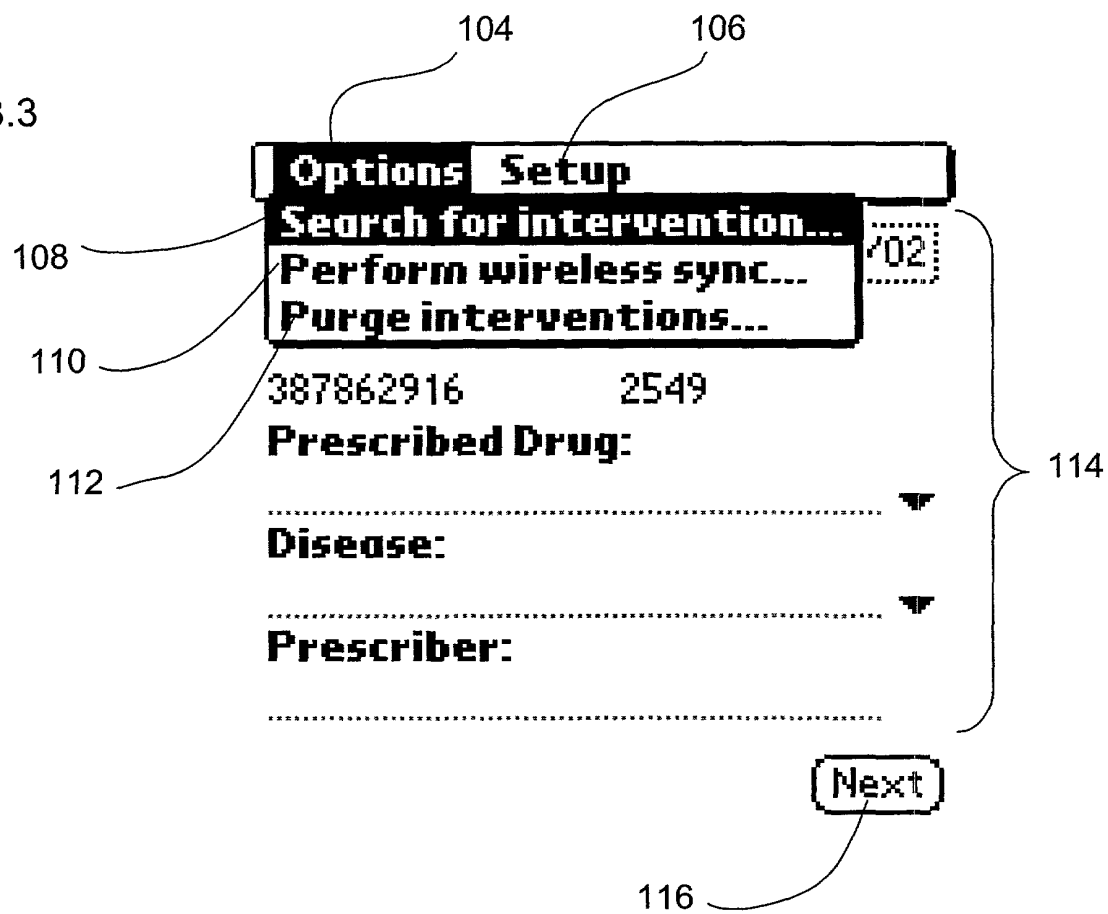


FIG. 3.4

The screenshot displays a software interface with a menu bar at the top containing 'Options' and 'Setup'. The 'Setup' menu is open, showing two options: 'Set preferences...' and 'Delete database...'. Below the menu, there are several form fields: 'Site ID: 6', 'Rotation ID: 387862916', 'Student ID: 2549', 'Prescribed Drug:', 'Disease:', and 'Prescriber:'. Each of these fields has a dotted line for input and a small downward arrow on the right. At the bottom right, there is a 'Next' button. Reference numerals 106, 118, 120, 114, and 116 point to the menu bar, the 'Set preferences...' option, the 'Delete database...' option, the group of form fields, and the 'Next' button, respectively.

Options Setup

Site ID: 6; Set preferences...  
Delete database...

Rotation ID: Student ID:  
387862916 2549

Prescribed Drug:

..... ▼

Disease:

..... ▼

Prescriber:

.....

Next

FIG. 3.5

**Preferences** 118

**Wireless Sync URL:**  
tcp://www.drake.edu/cgi-bin/sync.pl

**Site ID:** **Rotation ID:** 1195 119

**Student ID:**

☒ Enable Speed Entry 122

Accept 124 Cancel 126

FIG. 3.6

114 {

**Site ID:** **Date:** 1/13/02

**Rotation ID:** 1195 **Student ID:**

**Prescribed Drug:** Lipitor } 128

**Disease:** Hyperlipidemia } 130

**Prescriber:** Smith } 132

Next



FIG. 3.7

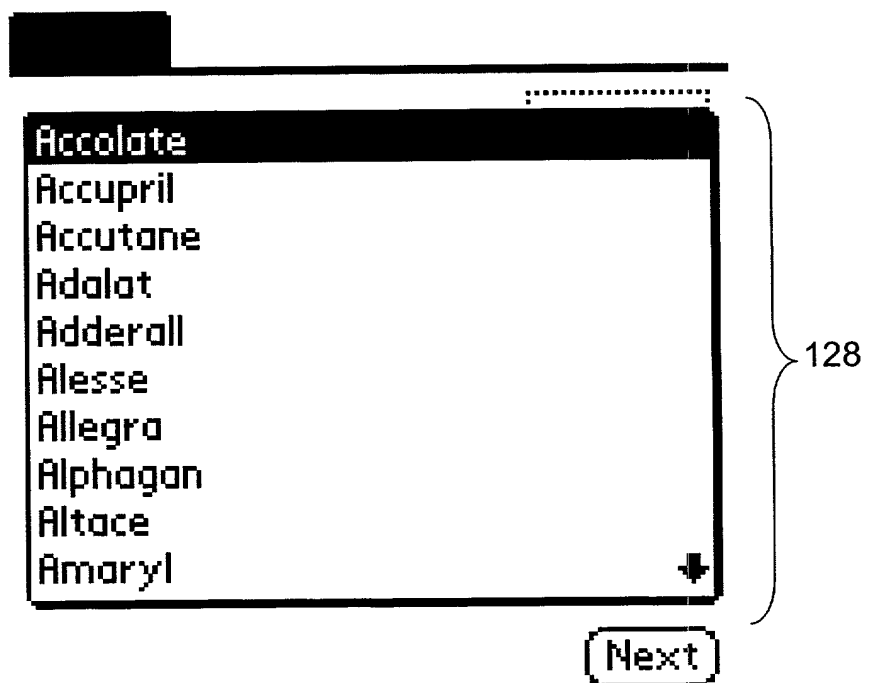


FIG. 3.8

134

**Drug-Related Problem**

[Please select one]

Unnecessary Drug Therapy

Wrong Drug

**Dosage Too Low**

Adverse Drug Reaction

Dosage Too High

Inappropriate Compliance

Need Drug Therapy

138

136

Back Next

The image shows a graphical user interface for selecting a drug-related problem. At the top, a black title bar with white text reads 'Drug-Related Problem' and is labeled with the number 134. Below this is a list of seven options, each on a new line. The first option is '[Please select one]'. The second is 'Unnecessary Drug Therapy'. The third is 'Wrong Drug'. The fourth, 'Dosage Too Low', is highlighted with a black background and white text. The fifth is 'Adverse Drug Reaction'. The sixth is 'Dosage Too High'. The seventh is 'Inappropriate Compliance'. The eighth is 'Need Drug Therapy'. A bracket on the right side of the list, labeled 136, groups these seven options. A line points from the number 138 to the list area. At the bottom of the screen are two buttons: 'Back' and 'Next'.

FIG. 3.9

138

**Dosage Too Low**

[Please select one]

**Wrong Dose**

Frequency Inappropriate

Duration Inappropriate

Incorrect Storage

Incorrect Administration

Drug Interaction

140

Back Next

FIG. 3.10

142

**Prescription Type**

[Please select one]  
New Rx  
Refill Rx

143

Back Next

Prescription Type	
[Please select one]	
New Rx	
Refill Rx	

Back   Next

FIG. 3.11

144

**Patient Risk**

[Please select one]  
Significant  
**Moderate**  
Mild

145

Back Next

Patient Risk	
[Please select one]	
Significant	
<b>Moderate</b>	
Mild	

Back Next

FIG. 3.12

146

**Problem Type**

[Please select one]
Actual
Potential

147

Back Next

The image shows a graphical user interface for selecting a problem type. At the top, a black horizontal bar with the text "Problem Type" in white is labeled with the number 146. Below this bar is a selection box. The selection box has a dropdown menu that is currently open, showing the text "[Please select one]" in a black box. Below this, the options "Actual" and "Potential" are listed in a white box. A bracket to the right of the selection box is labeled with the number 147. At the bottom of the screen, there are two buttons labeled "Back" and "Next".

FIG. 3.13

148

**Recommendation**

[Please select one]  
Discontinue Therapy  
Change Medication  
Add Medication  
**Change Dose**  
Change Dosage Form  
Change Regimen  
Patient Education/Instruction  
Refer Patient  
Continue Unchanged

149

Back Next

The image shows a graphical user interface for a medical recommendation system. At the top, a black header bar with the word 'Recommendation' in white is labeled with the number 148. Below this is a list box containing several options. The first option is '[Please select one]'. The subsequent options are 'Discontinue Therapy', 'Change Medication', 'Add Medication', 'Change Dose' (which is highlighted with a black background), 'Change Dosage Form', 'Change Regimen', 'Patient Education/Instruction', 'Refer Patient', and 'Continue Unchanged'. A small downward-pointing arrow is located at the bottom right of the list box. A bracket on the right side of the list box, spanning from 'Discontinue Therapy' to 'Continue Unchanged', is labeled with the number 149. Below the list box are two buttons: 'Back' and 'Next', each enclosed in a rounded rectangular frame.

FIG. 3.14

150

**Activity**

[Please select one]

- Prescriber Contacted By Phone
- Prescriber Contacted By Fax
- Patient Consultation
- Payer/Processor Contacted
- Referred Patient
- Patient Monitoring Initiated
- Other Intervention

151

Back Next

The image shows a graphical user interface for a medical or administrative system. At the top, a black header bar contains the word 'Activity' in white. Below this, a white rectangular box with a black border contains a list of activities. The first line of the box is '[Please select one]'. The list includes: 'Prescriber Contacted By Phone' (which is highlighted with a black background), 'Prescriber Contacted By Fax', 'Patient Consultation', 'Payer/Processor Contacted', 'Referred Patient', 'Patient Monitoring Initiated', and 'Other Intervention'. To the right of the list, a large curly bracket groups the entire list area and is labeled '151'. Above the 'Activity' header, a line points to the number '150'. At the bottom of the interface, there are two buttons: 'Back' and 'Next', each enclosed in a rounded rectangle.



FIG. 3.15

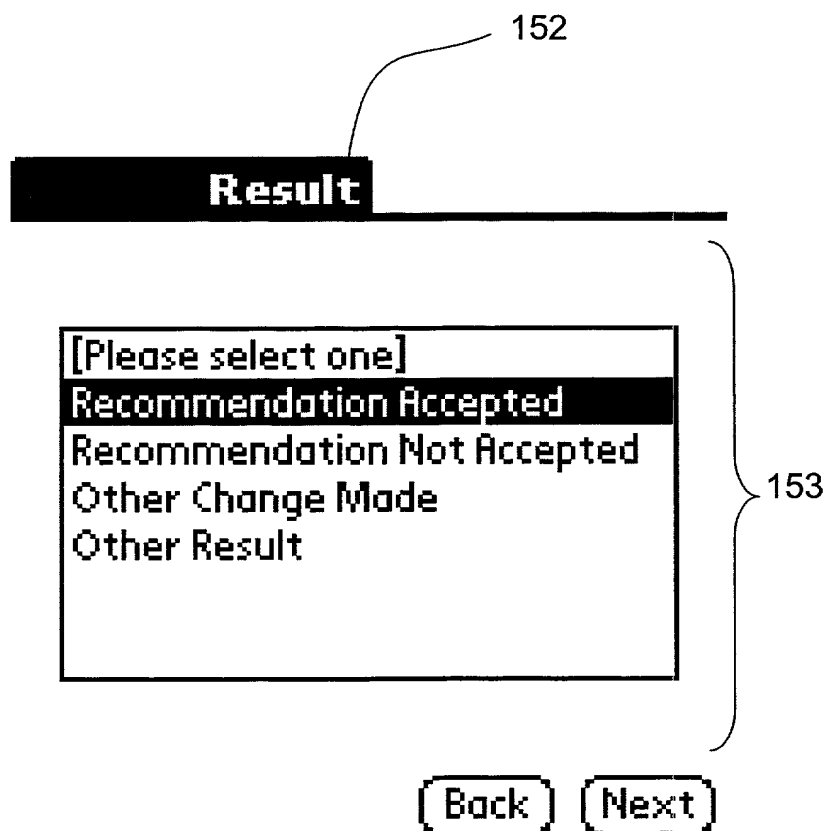


FIG. 3.16

154

**Time**

[Please select one]  
0 - 6 minutes  
**6 - 15 minutes**  
15 - 30 minutes  
> 30 minutes

155

Back Next


FIG. 3.17

156


**Patient Information**

**Patient ID:** JS.....


158 **Allergies:**

Penicillins..... 


**Medication History:**

Glucophage..... 

**Family History:**

Hyperlipidemia..... 

**Social History:**

Tobacco..... 

157


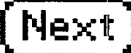
 

FIG. 3.18

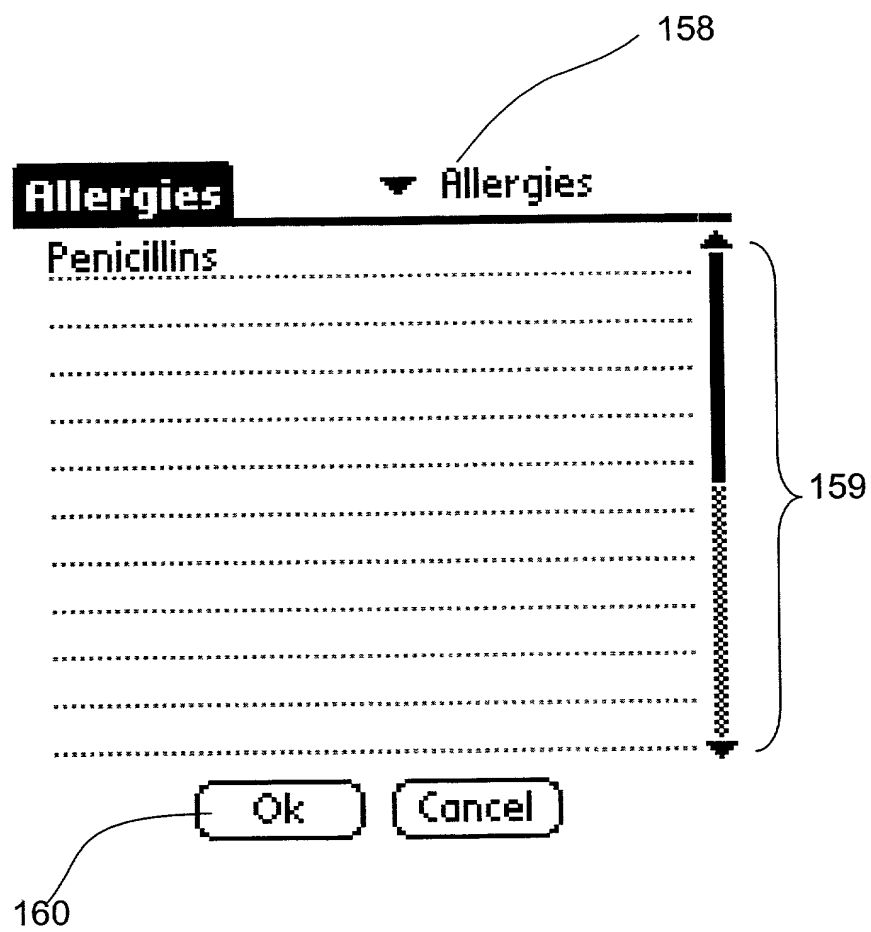


FIG. 3.19

The image shows a graphical user interface for a 'Lab Values' form. At the top, a black header bar contains the text 'Lab Values' in white. Below the header, the text 'Total Cholesterol 285 mg/dl' is displayed. This is followed by a list of 15 horizontal dotted lines for data entry. To the right of this list is a vertical arrow pointing upwards, with a solid black top section and a checkered bottom section. A bracket to the right of the arrow is labeled '163'. Below the dotted lines are three buttons: 'Add Values', 'Back', and 'Next'. A bracket to the left of the 'Add Values' button is labeled '164'. A line from the number '162' at the top points to the 'Lab Values' header.

162

**Lab Values**

Total Cholesterol 285 mg/dl

163

Add Values Back Next

164

FIG. 3.20

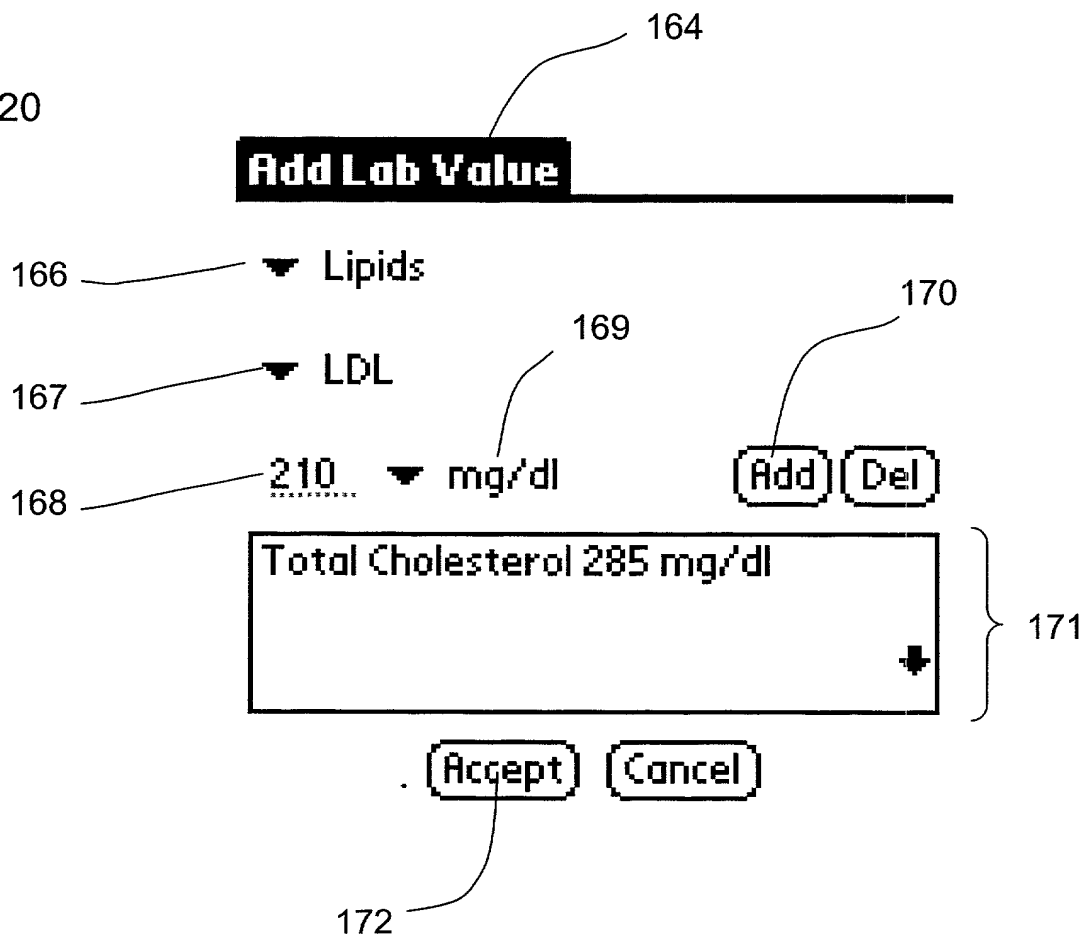






FIG. 3.21


**SOAP Notes**

176 { **Subjective:** .....  }

177 { **Objective:** .....  }

178 { **Assessment:** .....  }

179 { **Plan:** .....  }

180 { **Follow Up:** .....  }

175 }

[Back](#) [Next](#)

FIG. 3.22

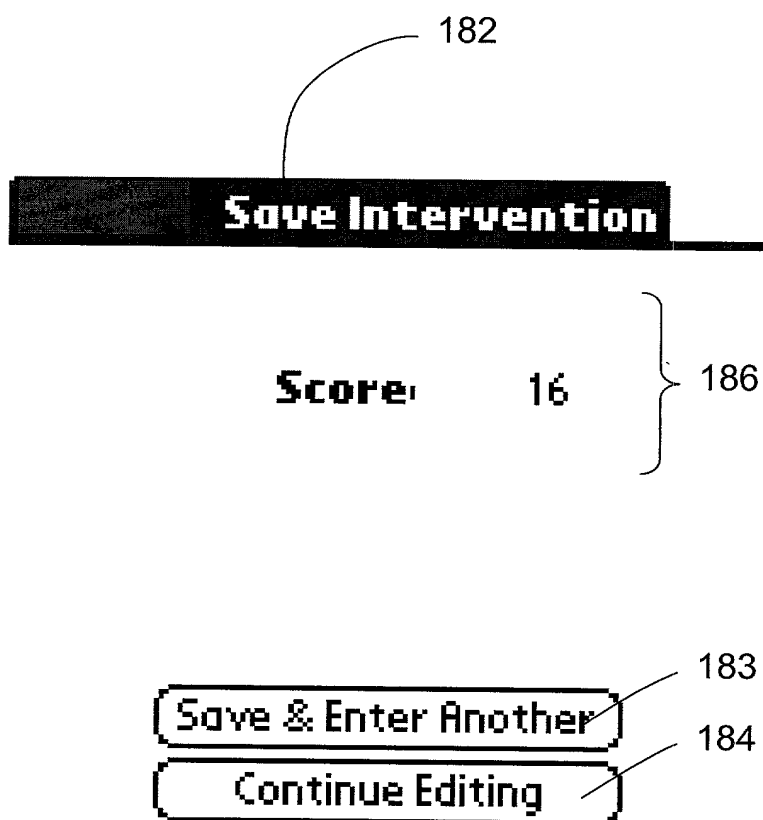




FIG. 3.23.1

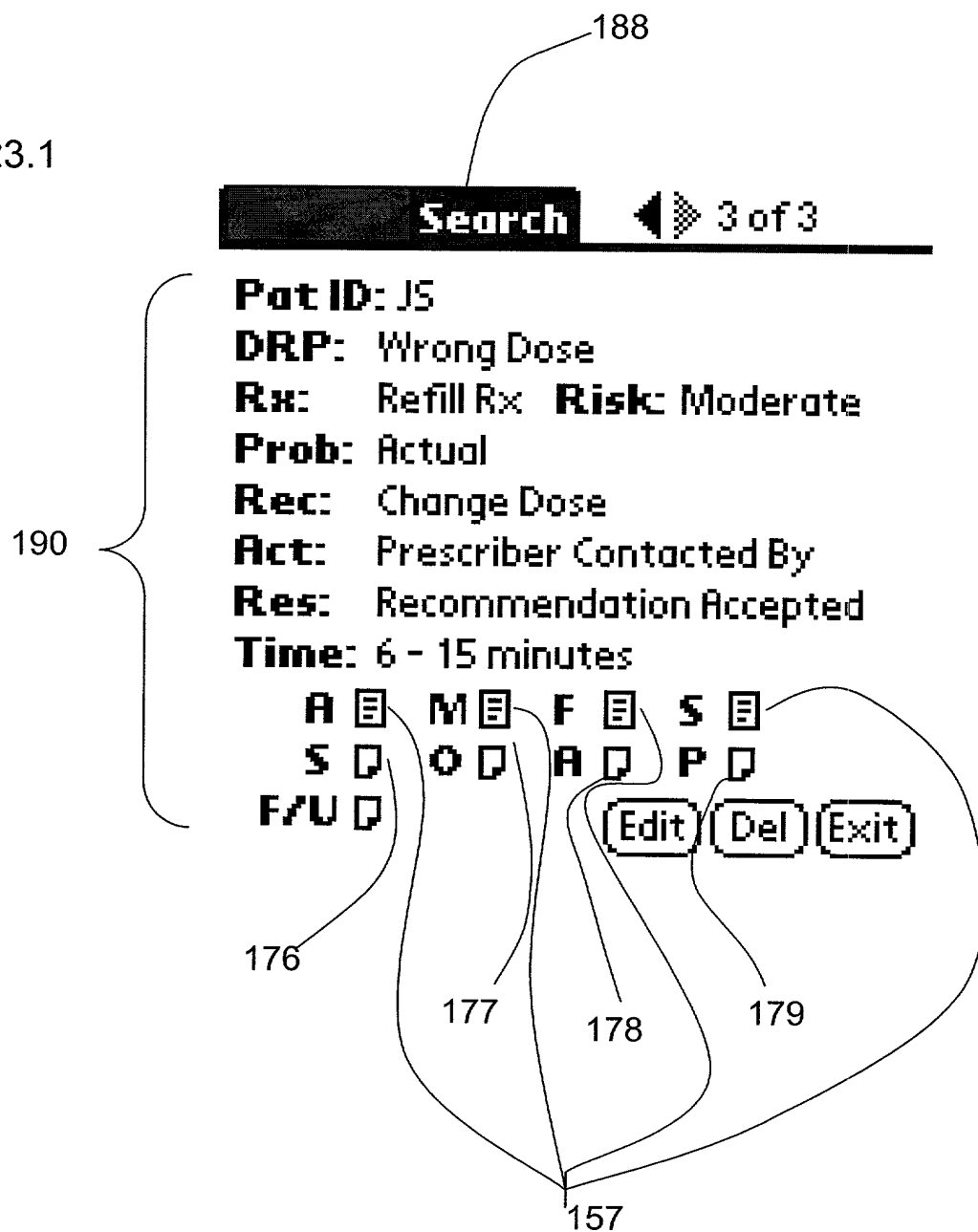


FIG. 3.23.2

188

**Search** 1 of 1

**Pat ID:** 01      **Date:** 2/20/02

**DRP:** Wrong Dose

**Rx:** New Rx    **Risk:** Moderate

**Prob:** Potentia    **Drug:** Zantac

**Rec:** Change Dose

**Act:** Prescriber Contacted By

**Res:** Recommendation Accepted

**Time:** 6 - 15 minutes    **SCORE:** 15

190 {

A ☐ M ☐ F ☐ S ☐ 186

S ☐ O ☐ A ☐ P ☐

F/U ☐ Edit Del Exit

176

177

178

179

157

FIG. 3.24

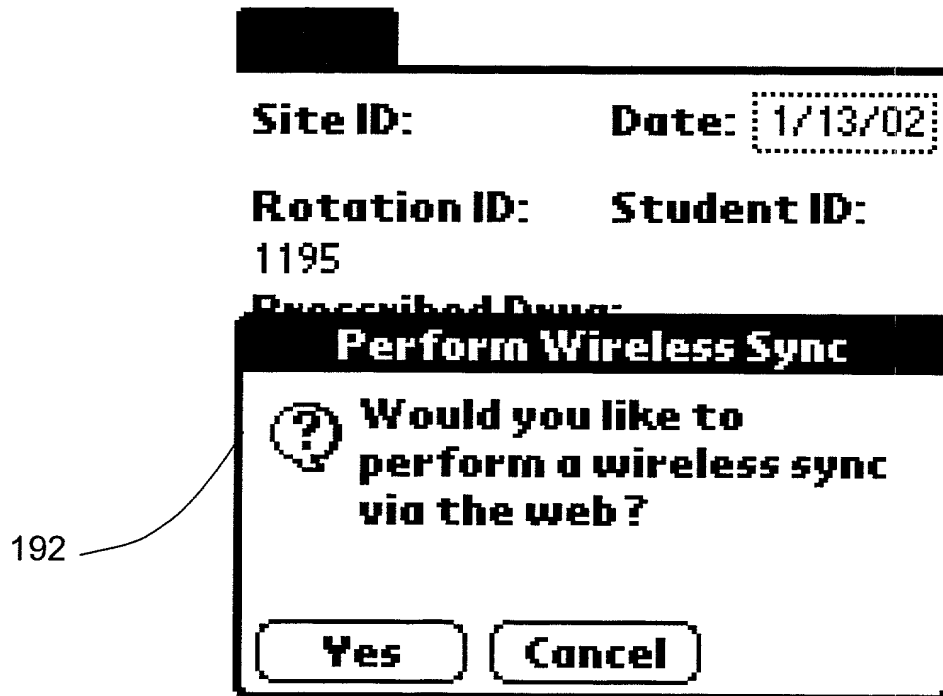


FIG. 3.25

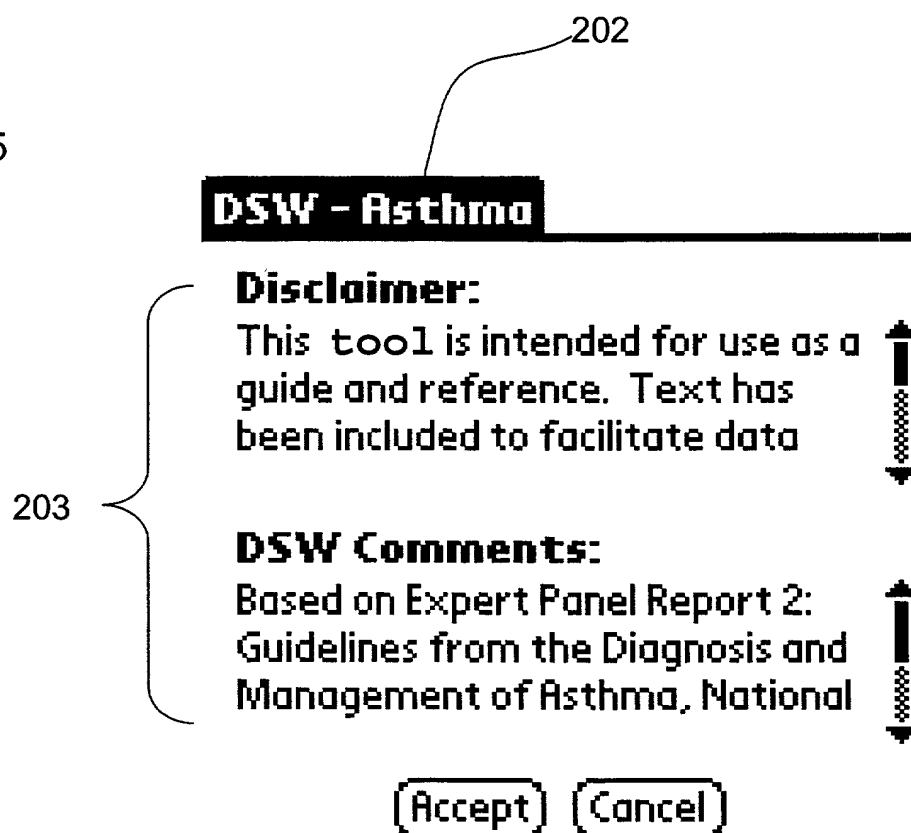


FIG. 3.26

204

**DSW - Asthma: Age**

206 { [Please select one]

205 { 0 - 5 years

> 5 years

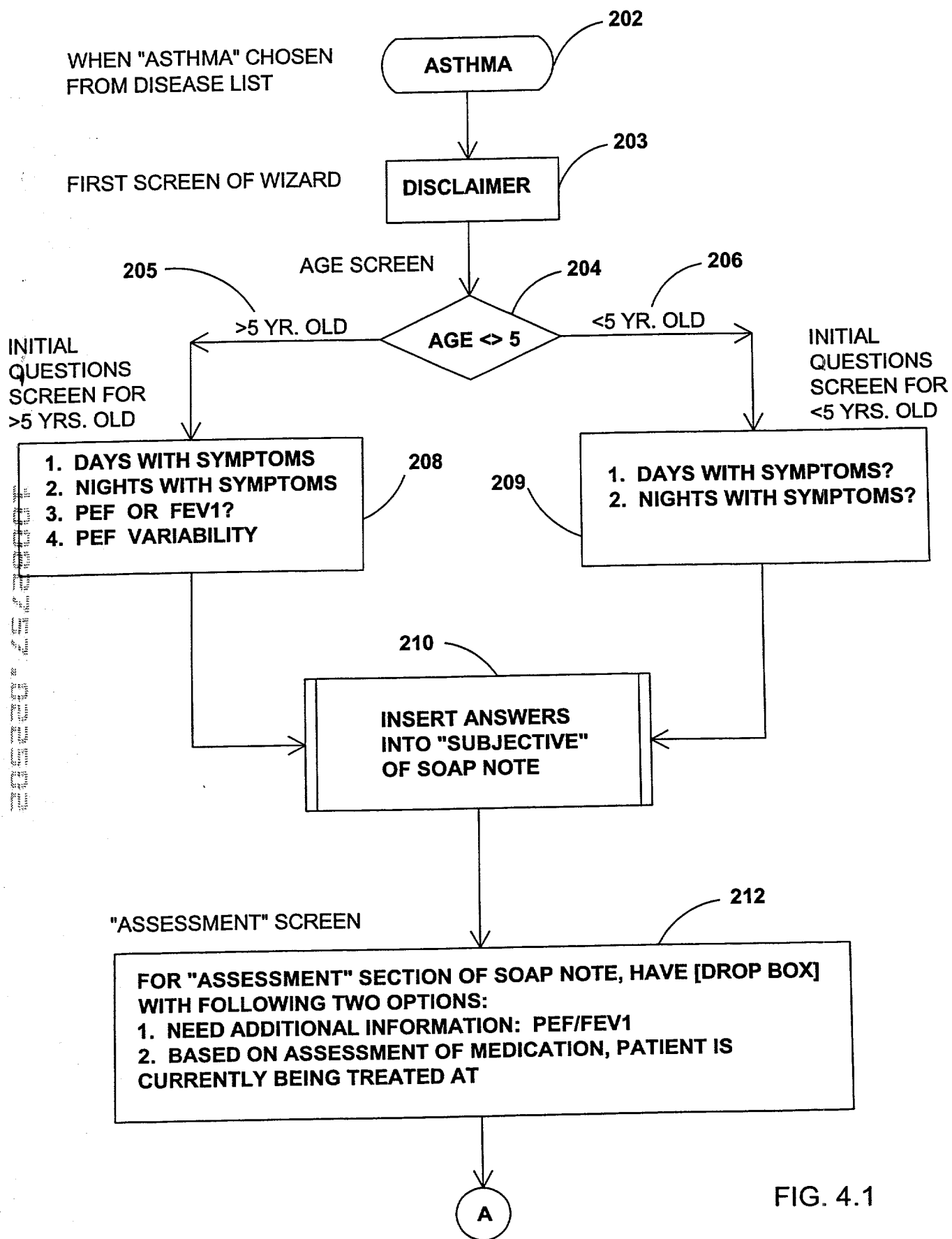


FIG. 4.1

A

HAVE DROP-DOWN MENU AT END OF TEXT FROM QUESTION 2 ABOVE WITH OPTIONS OF STEP 4, STEP 3, STEP 2, STEP 1 AND THEN HAVE THE CHOSEN OPTION APPEAR AT THE END OF THE TEXT FROM QUESTION 2.

YES/NO PATIENT CURRENTLY HAS AVAILABLE A SHORT ACTING BETA-2 AGONIST FOR ACUTE EXACERBATIONS?

NO

ADD TEXT "RECOMMEND ADDING SHORT-ACTING BETA-2 AGONIST FOR ACUTE EXACERBATIONS" TO PLAN SECTION OF SOAP NOTES

YES

TEXT "PATIENT APPEARS TO BE" (THEN ADD DROP DOWN BOX WITH THE FOLLOWING OPTIONS:  
IN CONTROL WITH CURRENT MEDICATIONS  
IN NEED OF ADDITIONAL DRUG THERAPY  
IN NEED OF COMPLIANCE MONITORING/TECHNIQUE MONITORING  
OTHER (USER FILL IN)

PLAN SCREEN

INSERT TEXT "RECOMMEND PATIENT" DROP BOX CONTAINING:  
CONTINUE CURRENT THERAPY  
BE ASSESSED FOR ASTHMA SEVERITY AND CONTROL BY PHYSICIAN  
OTHER (USER FILL IN)

FOLLOW-UP SCREEN

ADD TEXT "REVIEW TREATMENT AND SYMPTOMS IN" (DROP BOX)  
1,2,3,4,5,6 (DROP BOX) DAYS, MONTHS.

ALSO HAVE "GOALS OF THERAPY" TEXT TO INCLUDE FOR REFERENCE

FIG. 4.2

235 236 238 239 240

WHEN "HYPERLIPIDEMIA"  
CHOSEN FROM DISEASE LIST

**HYPERLIPIDEMIA**

232

FIRST SCREEN  
OF WIZARD

**DISCLAIMER AND REFERENCE  
ATP III GUIDELINES**

233

DROP INTO "SUBJECTIVE"  
SECTION OF SOAP NOTE

**ENTER PATIENT'S AGE**

234

236

**IDENTIFY PRESENCE OF CLINICAL ATHEROSCIEROTIC DISEASE THAT  
CONFERS HIGH RISK FOR CORONOARY ARTERY DISEASE (CHD)  
EVENTS (CHD RISK EQUIVALENT):**

**YES/NO CHECK BOXES OR RADIAL BUTTONS**

1. CLINICAL CHD
2. SYMPTOMATIC CAROTID ARTERY DISEASE
3. PERIPHERAL ARTERIAL DISEASE
4. ABDOMINAL AORTIC ANEURYSM
5. DIABETES

238

**DETERMINE PRESENCE OF MAJOR RISK FACTORS**

1. CIGARETTE SMOKING
2. HYPERTENSION (BP  $\geq$  140/90 mmHG OR ON ANTIHYPERTENSIVE MEDICATION)
3. FAMILY HISTORY OF PREMATURE CORONARY HEART DISEASE, CHD (CHD IN MALE FIRST DEGREE RELATIVE  $<$ 55 YEARS: CHD IN FEMALE FIRST DEGREE RELATIVE  $<$ 65 YEARS)
4. AGE (MEN  $\geq$  45 YEARS, WOMEN  $\geq$  55 YEARS)

DROP INTO "OBJECTIVE"  
SECTION OF SOAP NOTE

240

**LAB VALUES:**  
**TOTAL CHOLESTEROL**  
**LDL**  
**HDL**  
**TG**

**TC/HDL RATIO**

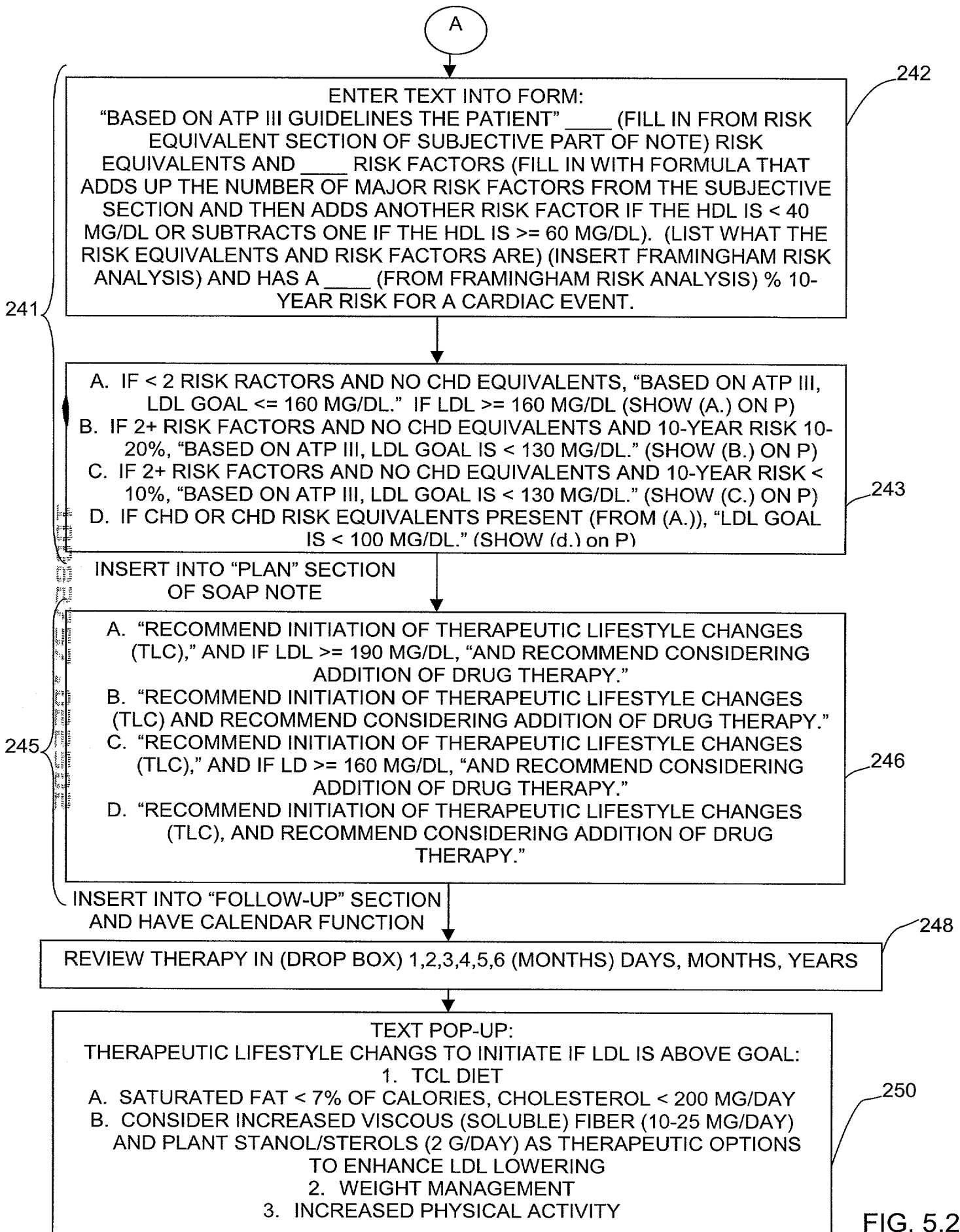
**BLOOD PRESSURE: SYSTOLIC/DIASTOLIC, TREATED YES/NO**

ENTER INTO "ASSESSMENT"  
SECTION OF SOAP NOTE

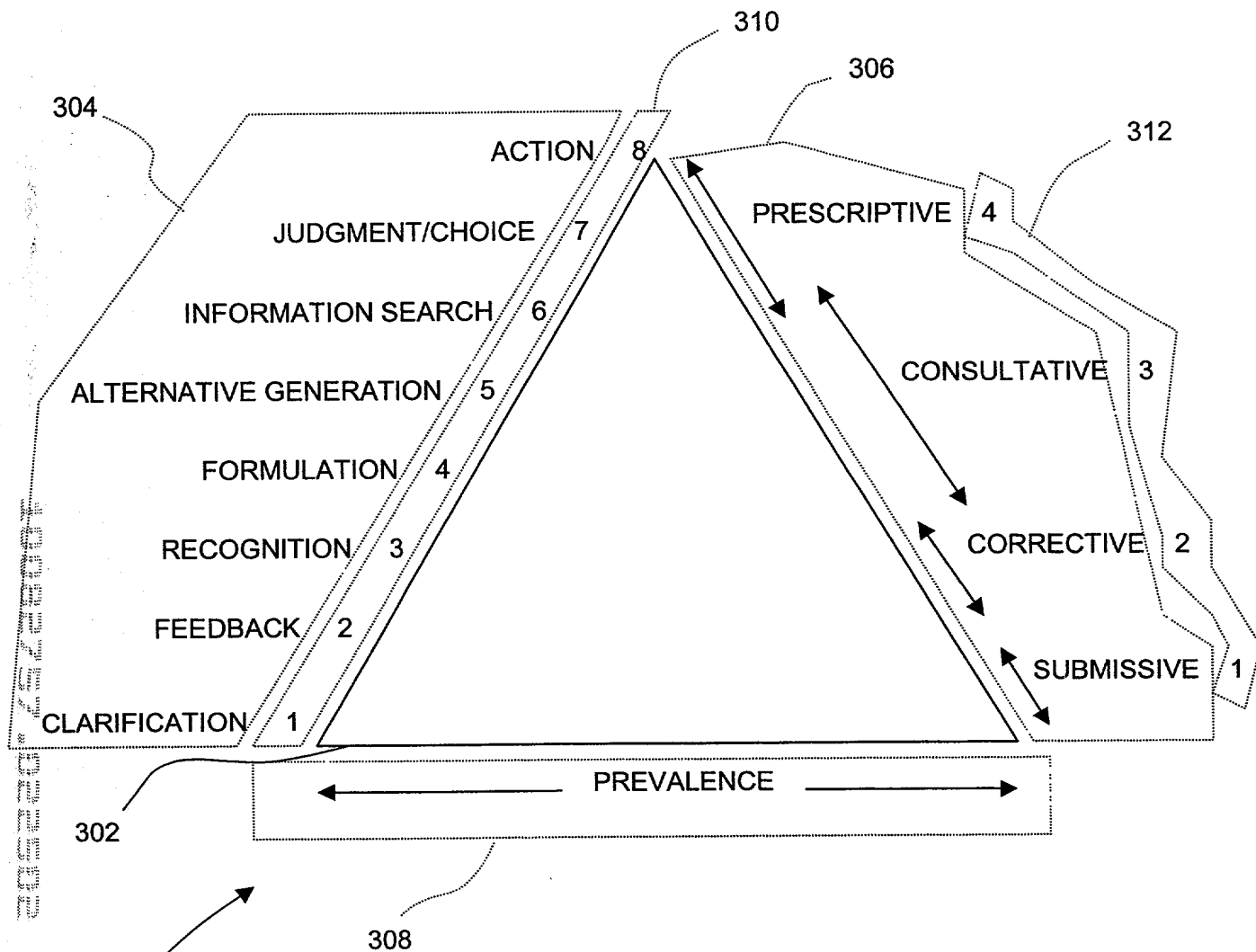
**A**

FIG. 5.1





**FIG. 5.2**



**FIG. 6**

**1. PLEASE USE THE SCALE BELOW TO RATE THE FOLLOWING:**

- 8 = ACTION – ACTING ON THE CHOICE
  - 7 = JUDGMENT / CHOICE – MAKING A JUDGMENT ACROSS A NORMATIVE STANDARD AND COMPARING ALTERNATIVES AND EMPLOYING DECISION RULES TO MAKE A SELECTION
  - 6 = INFORMATION SEARCH – SEEKING PROPERTIES AND ATTRIBUTES OF THE ALTERNATIVES THAT WILL IMPROVE CERTAINTY AND DECREASE RISK
  - 5 = ALTERNATIVE GENERATION – LIMITING THE NUMBER OF POSSIBLE ANSWERS BY SELECTING A FEW FROM THE POPULATION OF POSSIBLE SOLUTIONS
  - 4 = FORMULATION – EXPLORING AND CLASSIFYING THE DECISION SITUATION, SEEKING TO UNDERSTAND RELATIONSHIPS AMONG VARIABLES, AND INITIATING A PLAN TO ACHIEVE THE PREFERRED OUTCOME
  - 3 = RECOGNITION – RECOGNITION OF SITUATIONS
  - 2 = FEEDBACK – TO FACILITATE RECOGNITION
  - 1 = CLARIFICATION – NOT A TRUE STEP IN “DECISION-MAKING”
- 322

**WHAT LEVEL OF COGNITIVE ABILITY IS REQUIRED TO IDENTIFY THE FOLLOWING:**

**UNNECESSARY DRUG THERAPY**

- 3 NO MEDICAL INDICATION
- 3 ADDICTION / RECREATIONAL DRUG USE
- 3 NONDRUG THERAPY MORE APPROPRIATE
- 4 DUPLICATE THERAPY
- 5 TREATING AVOIDABLE ADVERSE REACTION

**WRONG DRUG**

- 3 DOSAGE FORM INAPPROPRIATE
- 3 CONTRAINDICATION PRESENT
- 3 CONDITION REFRACTORY TO DRUG
- 3 DRUG NOT INDICATED FOR CONDITION
- 4 MORE EFFECTIVE DRUG AVAILABLE

**DOSAGE TOO LOW**

- 3 WRONG DOSE
- 3 FREQUENCY INAPPROPRIATE
- 3 DURATION INAPPROPRIATE
- 3 INCORRECT STORAGE
- 3 INCORRECT ADMINISTRATION
- 3 DRUG INTERACTION

**ADVERSE DRUG REACTION**

- 3 UNSAFE DRUG FOR PATIENT
- 3 INCORRECT ADMINISTRATION
- 3 DRUG INTERACTION
- 3 DOSE INCREASE / DECREASE TOO FAST
- 3 UNDESIRABLE EFFECT

**DOSAGE TOO HIGH**

- 3 WRONG DOSE
- 3 FREQUENCY INAPPROPRIATE

- 3 DURATION INAPPROPRIATE  
4 DRUG INTERACTION  
 INAPPROPRIATE COMPLIANCE  
3 DRUG PRODUCT NOT AVAILABLE  
3 CANNOT AFFORD DRUG PRODUCT  
3 DOES NOT UNDERSTAND INSTRUCTIONS  
3 PATIENT DOSES HIGHER THAN PRESCRIBED  
3 PATIENT DOSES LOWER THAN PRESCRIBED  
3 PROBLEM WITH THIRD PARTY PAYER  
 NEED DRUG THERAPY  
3 UNTREATED INDICATION  
3 PROPHYLACTIC THERAPY  
 PRESCRIPTION TYPE  
 \_\_\_\_\_ NEW RX  
 \_\_\_\_\_ REFILL RX

143

**2. WHICH WOULD YOU CONSIDER TO BE A MORE SIGNIFICANT INTERACTION?**

- PROBLEM TYPE  
2 ACTUAL  
1 POTENTIAL

147

312

**3. PLEASE USE THE SCALE BELOW TO RATE THE FOLLOWING ITEMS FOR THE AMOUNT OF ACTIVITY REQUIRED TO PERFORM:**

- 4= PRESCRIPTIVE  
 3= CONSULTATIVE  
 2= CORRECTIVE  
 1= SUBMISSIVE

306

**INTERVENTION RECOMMENDATION**

- 3 DISCONTINUE THERAPY  
3 CHANGE MEDICATION  
3 ADD MEDICATION  
3 CHANGE DOSE  
3 CHANGE DOSAGE FORM  
3 CHANGE REGIMEN  
3 PATIENT EDUCATION / INSTRUCTION  
1 REFER PATIENT  
1 CONTINUE UNCHANGED  
3 DISEASE STATE MANAGEMENT  
2 NON-DRUG THERAPY  
1 OTHER RECOMMENDATION

149

**INTERVENTION ACTIVITY**

- 3 PRESCRIBER CONTACTED BY PHONE  
3 PRESCRIBER CONTACTED BY FAX

151

- 3 PATIENT CONSULTATION  
2 PAYER / PROCESSOR CONTACTED  
1 REFERRED PATIENT  
4 PATIENT MONITORING INITIATED  
1 OTHER INTERVENTION

## INTERVENTION RESULT

- 3 RECOMMENDATION NOT ACCEPTED  
1 OTHER CHANGE MADE  
1 OTHER RESULT

153

**4. SOAP NOTE**

- \_\_\_\_\_ SUBJECTIVE  
 \_\_\_\_\_ OBJECTIVE  
 \_\_\_\_\_ ASSESSMENT  
 \_\_\_\_\_ PLAN  
 \_\_\_\_\_ FOLLOW-UP

175

**5. LAB VALUES**

PLEASE PROVIDE A RECOMMENDATION AS TO WHETHER OR NOT LAB VALUES SHOULD BE INCLUDED IN THE DETERMINATION OF THE DOI SCORE. DOES HAVING LAB VALUES PRESENT IN THE INTERVENTION INDICATE THE STUDENT HAS GONE TO MORE EFFORT OR PUT MORE THOUGHT INTO THE INTERVENTION? SUGGEST A POSSIBLE RANKING (E.G. ONE POINT FOR EACH VALUE PRESENT UP TO THREE POINTS).

IF SO, HOW? (ONE POINT FOR EACH LAB VALUE ENTERED? UP TO A LIMIT?)  
 ONE POINT IS GIVEN FOR EACH LAB VALUE ENTERED UP TO THREE TOTAL POINTS FOR THIS SECTION.

**6. SOAP NOTES**

PLEASE PROVIDE A RECOMMENDATION AS TO WHETHER OR NOT SOAP SHOULD BE INCLUDED IN THE DETERMINATION OF THE DOI SCORE.

IF SO, HOW?

NO POINTS ARE CURRENTLY GIVEN FOR SOAP NOTES.

**7. PATIENT INFORMATION**

PLEASE PROVIDE A RECOMMENDATION AS TO WHETHER OR NOT THE INCLUSION OF PATIENT INFORMATION SHOULD BE INCLUDED IN THE DETERMINATION OF THE DOI SCORE.

IS SO, HOW?

NO POINTS ARE CURRENTLY GIVEN FOR THE INCLUSION OF PATIENT INFORMATION.

SHOULD ANY OF THE ABOVE SECTIONS BE WEIGHTED HIGHER THAN OTHERS?  
 SECTIONS ARE ALL EQUALLY WEIGHTED.